





a rotary operation member;

conversion means for converting a rotating amount of said rotary operation member into an amount of variation of the control data of a position of a lens; and conversion characteristic changing means for changing a conversion

characteristic of said conversion means; and

wherein when the conversion characteristic mode set at this time is different from the conversion characteristic mode set in the previous sampling, the reference data of the amount of variation of the conversion characteristic mode set at this time is corrected based on the control data of the conversion characteristic mode set in the previous sampling.

## REMARKS

Claims 1-7 have been canceled without prejudice. Claims 8 and 9 have been added.

Attached hereto is a marked-up version of the changes made to the claims by this

Amendment. This marked-up version has been entitled "Version With Markings To Show

Changes Made."

The Examiner has rejected applicants' claims 1-4 and 6-7 under 35 USC 102(e) as anticipated by the Sato, et al. patent. Applicants' claim 5 has been also been rejected under under 35 USC § 103(ii) as unpatentable based on the Sato, et al. patent. Applicants have canceled claims 1-7, "hereby rendering the Examiner's rejections with respect to these claims moot. Moreover, to the extent the Examiner believes the rejections are applicable to added claims 8-9, the rejections are respectfully traversed.

Applicants' independent claim 8 is directed to a lens control apparatus comprising a rotary operation member. Claim 8 also calls for a conversion means for converting a rotating amount of the rotary operation member into an amount of variation of the control data of a

**2**004

position of a lens, and a conversion characteristic changing means for changing a conversion characteristic of the conversion means. Claim 9 has like features as claim 8 with the additional feature that " when the conversion characteristic mode set at this time is different from the conversion characteristic mode set in the previous sampling, the reference data of the amount of variation of the conversion characteristic mode set at this time is corrected based on the control data of the conversion characteristic mode set in the previous sampling."

The support for independent claims 8 and 9 can be found in applicants' FIGS. 2, 5, 10 and 11 and the discussion in applicants' specification directed thereto. With respect to claim 9 the Examiner's attention is specifically directed to page 15, lines 16-23, of applicants' specification. Additionally, the recited features of "amount of variation", "control data" and "reference data" in claims 8 and 9 correspond, respectively, to the parameters dY, Y and X set forth in applicants' specification.

The constructions of applicants' claims 8 and 9 are not taught or suggested by the cited art of record. More particularly, the Examiner has argued with respect to the Sato, et al. patent as follows:

"Sato discloses a lens control system which includes a manual operation member (105) that is rotatively operated by a user's hand, an encoder (106) for detecting the amount of rotation of the manual operation member (105), a lens group (102), and a CPU (104) for controlling the operation of the lens group according to the input from the manual rotation member. The manual operation member represents a rotary operation member; the encoder represents a state detecting means; and the CPU represents a conversion circuit since it takes the signal from the encoder and converts it to a position signal of the lens. Additionally, the lens is controlled on the basis of the signal output from the CPU (104). Sato also discloses that once the operation member (105) is operated, the signal input from the encoder is used to select an operating speed, as shown in FIG. 14.

07/29/02 10:45 FAX 212 6829694

In this case, the operating speed is interpreted to be the conversion characteristic as discussed in the claim."

The Examiner has thus argued that the conversion characteristic in the Sato patent is the operating speed of the rotary member. However, the conversion characteristic now being claimed by applicants is one that governs the relationship between the rotating amount of the rotary operation member of an operating member and the amount of variation of the control data of a position of a lens, and not one that governs the operating speed of the rotary member.

Accordingly, applicant's claim 8 and 9 in reciting "conversion means for converting a rotating amount of said rotary operation member into an amount of variation of the control data of a position of a lens . . . and conversion characteristic changing means for changing a conversion characteristic of said conversion means" patentabluy distinguish over the Sato, et al patent.

In view of the above, it is submitted that applicants' claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested.

Dated: July 29, 2002

Robin, Blecker & Daley 330 Madison Avenue New York, NY 10017 (212) 682-9640

Respectfully submitted,

## Vers on With Markings To Show Changes Made

## IN THE CLAIMS

Cancel claims 1-7 without prejudice and add claims 8-9 as follows:

8. A lens control apparatus, comprising:

a rotani operation member,

conversion means for converting a rotating amount of said rotary operation member into an amount of variation of the control data of a position of a lens; and conversion characteristic changing means for changing a conversion characteristic of said conversion means.

9. A lens cont of apparatus, comprising:

a rotary operation member,

conversion means for converting a rotating amount of said rotary operation member into an amount of variation of the control data of a position of a lens; and conversion characteristic changing means for changing a conversion characteristic of said conversion means; and

wherein when the conversion characteristic mode set at this time is different from the conversion characteristic mode set in the previous sampling, the reference data of the amount of variation of the conversion characteristic mode set at this time is corrected based on the control data of the conversion characteristic mode set in the previous sampling.